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operating commands to and from said plurality of on-board aircraft control devices.

CLAIM REJECTIONS – 35 U.S.C. § 112

The Examiner has rejected claim 1 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically the Examiner has rejected claim 1 for reciting limitations for which there is insufficient antecedent basis for the limitations in the claim. Applicant has amended claim 1 to provide antecedent basis for the limitations.

Further, the Examiner has asked that all occurrences in claim 1 of “state conditions” be changed to --state conditions information--. Applicant has amended claim 1 to change all “state conditions” to --state conditions information--.

Further still, the Examiner has asked that the term “capable of” be deleted in all cases within claim 1. Applicant has amended claim 1 to delete all cases of the term “capable of” within claim 1.

Accordingly, favorable reconsideration of amended claim 1 is, respectfully, requested.

CLAIM REJECTIONS – 35 U.S.C. § 103

The Examiner has rejected claims 1 and 2 under 35 U.S.C. § 103(a) as being unpatentable over Monroe (U.S. Patent 6,246,320) in view of Murray et al. (U.S. Patent 6,385,513).

Specifically, the Examiner states, as it applies to Monroe directly, that:

“Regarding claims 1-2 of the present application, Monroe discloses an aircraft catastrophic security system (10) comprising: - on-board aircraft danger signal device includes various condition sensors (19), motion and audio-detectors, video cameras (20,22,24,26...50), light

detectors, sound detectors and so on transmitting and receiving a plurality of a danger signals [figs.4,8, col.11, lines 1-42, col.14, lines 3-47 and col.17, lines 10-45];

- an on board aircraft control device controllably operating an aircraft (241) [fig. 15, col. 22, line 66 to col. 23, line 34];"

The applicant notes that the above cited condition sensors (19) are passive, these sensor do not control the aircraft. In addition, the applicant finds in Figs. 8, 9, and 15 that Monroe discloses an aircraft (10) using a plurality of sensors (19) to drive a controller (241). As shown in Fig. 15, Monroe's controller (241) has output arrows that merely send system messages to a recorder system (70) and drive an audio device (290), there are no outputs of (241) that actively control the aircraft.

It is the applicant's position that in Fig. 15 the controller (241) possesses no controllable operation of the aircraft. The applicant finds support for this position where Monroe merely considers his control circuit to be, "Fig. 15 is a detailed diagram of the onboard surveillance system" (column 10, lines 29-30).

In addition, what the Monroe patent and the subject invention consider as an aircraft are fundamentally different. It is the applicant's position that the aircraft (10) of the Monroe patent are commercial airliners that are associated with airports. This position is taken because all of Monroe's figures depict commercial airliners (10) in the air and in communications with airports, taxiing on runways, parked on tarmacs, or tethered at airport gates. The present application puts no limitation on the type of aircraft. A rogue military F-16 fighter jet with a nuclear weapon or a single engine crop duster plane with a "dirty bomb" would be included in the subject invention. It is the applicant's position that the Monroe patent does not include these types of aircraft. In addition, in the present application the aircraft is not necessarily dealing with an airport, since hijackers may be "personally flying the aircraft as bombs into buildings" (BACKGROUND OF THE INVENTION, fourth paragraph, first sentence.)

In further contrast to Monroe, the present application even allows external authorized personnel to place the aircraft into the controlled, restricted state without a danger signal from the aircraft (see the ABSTRACT, third sentence of the subject invention), since every second counts

in such an emergency. It would appear to the applicant that while Monroe's system would be "providing comprehensive audio and visual surveillance and monitoring" (column 8, line 33) tragedy would strike.

For the above-described reasons the applicant, respectfully, submits that claims 1 and 2 are distinguishable from and patentable over the Monroe patent. Accordingly, favorable reconsideration of claims 1 and 2 are, respectively, requested.

Further, the Examiner states that:

"- an on-board aircraft processing device (204) transceiving the danger signals from the on-board aircraft danger signal device includes aircraft conditions information [figs. 4,8, col. 17, line 46 to col. 18, line 26 and col. 20, lines 50-63] and"

In the present application, besides transmitting and receiving danger signals, the on-board aircraft processing device performs at least one very important function that Monroe's transceiver (204), or Monroe's entire patent, for that matter, does not perform. That function is to - immediately place the aircraft into a controlled, restricted state upon receipt of a danger signal (SUMMARY, third sentence.) This further confirms the applicant's position that Monroe's patent merely passes information back and forth and that (204) is not a processing device but merely a transmitter/receiver. In other words, Monroe's (204) does not participate in the same way, in the control and/or restriction of the outcome of the catastrophic condition, as the on-board aircraft processing device of the present application does.

For at least these differences, the on-board aircraft processing device of the subject invention is distinguished from Monroe's transceiver (204). Consequently, the applicant, respectfully, submits that claims 1 and 2 are distinguishable from and patentable over the Monroe patent. Accordingly, favorable reconsideration of claims 1 and 2 are, respectively, requested.

Still further, the examiner states that:

"- inform to-national and local authority/ground control tower (216)/ airport fire station

(226)/security center (222) [fig. 8, col. 17, line 61 to col. 18, line 59] and”

In this immediate foregoing Examiner's statement, it appears to the applicant that the Examiner confirms the applicant's position that the Monroe patent discloses commercial airliners (10) being involved with “ground control tower and security” (column 17, lines 61-62) and local airport (216), (226), and (222) functions (column 18, lines 24-26.) In total contrast, the present application discloses that any danger signal activated aircraft will be immediately involved with national authorities, who are not limited to being airport authorities, who place control and restriction on the aircraft (see Fig. 1 of the subject invention.) In the present application, there is no assumption that the aircraft is going to “land” anywhere, especially at an airport. The present application, seeks immediate national (since there is no limitation placed on these authorities they could be, for example, military, federal police, or the head of government's staff) involvement so that local communications do not impose time delays and miscommunication on dealing with the threat presented by the potential catastrophic event. In the subject invention, it is possible for national authorities to “completely fly the aircraft” (PREFERRED EMBODIMENT, paragraph 7, sentence 2.)

For the above-described reasons the applicant, respectfully, submits that claims 1 and 2 are distinguishable from and patentable over the Monroe patent. Accordingly, favorable reconsideration of claims 1 and 2 are, respectively, requested.

Even further, the Examiner states:

“- an external device (212) transceiving the on-board aircraft control state condition information to and from the on-board aircraft processing device (204) [fig. 4, 8, col. 17, line 61 to col. 18, line 59].”

In the immediate foregoing Examiner's statement, it appears to the applicant that the Examiner compares the “fixed ground resources via transceiver (212)” (column 18, line 20) to the external processing device of the present application. Specifically, in the immediately foregoing statement the Examiner is stating, “the ground transceiver (212) transceives the on-board aircraft control state condition information to and from the on-board transceiver (204)”. All this appears

to say to the applicant is that the two transceivers (212), (204) are merely in communication with one another. Consequently, the Examiner is confirming that the transceiver (212) also is merely a transmitter/receiver.

In addition, it is the applicant's position that Monroe's transceiver (212) is specifically communicating with ground resources positioned at an airport (column 18, lines 18-26.) The subject invention does not limit the location of the external processing device to the ground, for example, it could be in the air, space, ocean, or possibly below the ground. Moreover, the external processing device, of the subject invention, is not necessarily associated with an airport.

For the above-described reasons the applicant, respectfully, submits that claims 1 and 2 are distinguishable from and patentable over the Monroe patent. Accordingly, favorable reconsideration of claims 1 and 2 are, respectively, requested.

Specific to the Examiner's rejections of claims 1 and 2 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,246,320 to Monroe, in view of U.S. Patent No. 6,385,513 to Murray et al., the Examiner asserts that the Monroe reference teaches the aircraft catastrophic security system of the subject application except that:

"Monroe does not specifically mention a plurality of danger signal personnel codes and a plurality of danger signal device codes as claimed by the applicant. Codes are important signals used to represent letters or numbers in transmitting messages requiring secrecy or brevity. However, Monroe discloses the on-board security surveillance system (10) is adapted with an on-board control decoder (503) for communicating and monitoring various identification signals [col. 14, lines 28-47]. Furthermore, Murray teaches an aircraft monitoring system (100) upon detection of a serious event / determining of an abnormal condition further detecting one or more of several predetermined emergency condition and transmitting those data to the ground with the necessary decoding of the encoded messages by the radio frequency signals [fig. 3, col. 7, lines 6-21 and col. 12, lines 5]. Therefore, it would have been obvious to one having ordinary skill in the art to employ the system of Monroe as taught by Murray for providing / identifying accurate the source of the danger signal to place an aircraft into a controlled, restricted state and to enforce

safe disposition of the aircraft."

Applicant has carefully considered the Monroe and Murray references, and respectfully submits, for the reasons to be set out in detail hereafter, that neither of the references, individually, or in combination, discloses the invention of the subject application.

It is the applicant's position that the Examiner is correct in acknowledging that Monroe is an on-board security surveillance system and that Monroe does not disclose a plurality of danger signal personnel codes and a plurality of danger signal device codes, and that such signals are required for secrecy and brevity. However, additional uses for codes are to distinguish one signal from another and to conform to existing state of the art practices. The cited Monroe decoder (503) appears to the applicant to fall under the use category of distinguishing one signal from another (Monroe column 23, lines 4-7) and makes no mention of secrecy. The present application's use of danger signal personnel codes and danger signal device codes falls under the code use of secrecy, where the disclosure uses the word "secure" (PREFERRED EMBODIMENT, fifth paragraph, first sentence.)

Further, the Examiner cites Murray as transmitting "to the ground with the necessary decoding of the encoded messages by the radio frequency signals [fig. 3, col. 7, lines 6-21 and col. 12, lines 5.]" For the following reasons, it appears to the applicant that Murray adds nothing to overcome the shortcomings of Monroe on the subject of the use of codes for secrecy, they are: 1) Murray is conforming to the state of the art practices for the satellite transmission means that Murray's aircraft is communicating with on the ground, and 2) Murray is using RF signals for the electromagnetic frequency range of use.

In contrast: 1) the applicant's use of codes includes secrecy as mentioned above, 2) the applicant is not limited to a ground based destination of danger signals, and 3) the applicant may use RF signals, but the applicant places no limits on the electromagnetic frequency range that would be used by the codes.

Thus, it would not have been obvious to employ the system of Monroe as taught by Murray for providing / identifying accurately the source of the danger signal and to place an aircraft into a-controlled, restricted state and to enforce safe disposition of the aircraft. Instead,

Murray adds nothing to overcome the shortcomings of Monroe. In addition, the applicant finds no motivation in Murray to combine the airborne communication equipment (100) with the aircraft (10) of Monroe to result in aircraft catastrophic security system of the subject invention.

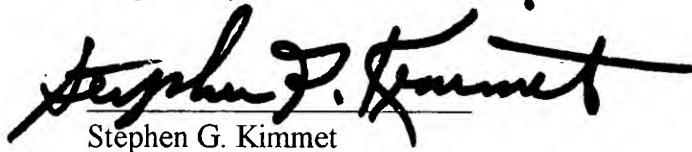
For the above-described reasons, applicants, respectfully, submit that claims 1 and 2 are distinguishable from and patentable over the cited references. Favorable reconsideration of amended claim 1, is respectfully requested.

A version of marked-up amended claim 1, to show changes made, is attached hereto to assist the Examiner in his analysis.

For all the reasons described in the preceding paragraphs, the applicant respectfully submits that the present application is now in condition for allowance. Accordingly, a timely action to that end is courteously solicited.

If the Examiner has any remaining questions or concerns, or would prefer claim language different from that included herein, the favor of a telephone call to the applicant is requested.

Respectfully submitted,



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Marked Up Version Of Claim 1 Showing Changes

1. (Amended) An aircraft catastrophic security system comprising:
  - a) [an] at least one on-board aircraft danger signal device [capable of] transmitting a plurality of danger signals and [capable of] receiving and transmitting a plurality of danger signal personnel codes and [capable of] receiving and transmitting a plurality of danger signal device codes;
  - b) an on-board aircraft control device [capable of] controllably operating an aircraft and [capable of] being controlled externally, remotely for controllably operating said aircraft;
  - c) an on-board aircraft processing device [capable of] receiving said danger signals from [said] a plurality of danger signal devices and [capable of] receiving and transmitting said danger signal personnel codes from and to a plurality of danger signal personnel and [capable of] transmitting and receiving said danger signal device codes from and to [a] said plurality of danger signal devices and [capable of] transmitting and receiving on-board control state conditions information and [capable of] operating said on-board aircraft control device and [capable of] transmitting said on-board control state conditions information to national and local authorities; and

d) an external processing device [capable of] transmitting and receiving said on-board aircraft control state conditions information to and from said plurality of on-board aircraft processing devices and [capable of] transmitting and receiving said on-board aircraft control state conditions information to and from said plurality of on-board aircraft control devices and [capable of] transmitting and receiving [said] a plurality of aircraft operating commands to and from said plurality of on-board aircraft processing devices and [capable of] transmitting and receiving on-board aircraft operating commands to and from said plurality of on-board aircraft control devices.